

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	Engineering and Technical Services CPFF in support of the Navy Modernization Programs of Hull Material and Electronics (HM&E) systems from 25 months through 36 months. Technical services are further described in the Statement of Work.				
				ESTIMATED COST	
				FIXED FEE	
				TOTAL EST COST + FEE	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AA	Holding Slin for Clin 0003 CPFF This priced SLIN is a holding SLIN for administrative purposes. This SLIN will be reduced with every additional incremental funding modification. FOB: Destination PSC CD: R425	1	Lot		
				ESTIMATED COST	
				FIXED FEE	
				TOTAL EST COST + FEE	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AB	Funding for Clin 0003 CPFF 10 U.S.C. 2410a invoked. Funding available for performance through 4 September 2019. FOB: Destination PURCHASE REQUEST NUMBER: 1300734407 PSC CD: R425	1	Lot		
				ESTIMATED COST FIXED FEE	
				TOTAL EST COST + FEE	
	ACRN AA CIN: 130073440700001				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004	Support Costs COST				
				ESTIMATED COST	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004AA	Holding Slin for Clin 0004 COST This priced SLIN is a holding SLIN for administrative purposes. This SLIN will be reduced with every additional incremental funding modification. FOB: Destination PSC CD: R425	1	Lot		
				ESTIMATED COST	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004AB	Funding Clin for Clin 0004 COST 10 U.S.C. 2410a invoked. Funding available for performance through 4 September 2019. FOB: Destination PURCHASE REQUEST NUMBER: 1300734407 PSC CD: R425	1	Lot		
	ACRN AA CIN: 130073440700002			ESTIMATED COST	

INCREMENTAL FUNDING

This Level of Effort delivery order has hereby been awarded in the in the amount of [REDACTED] and incremental funding in the amount of [REDACTED]. As a result, the total amount of funding obligated and available for payment under this order is [REDACTED]. It is estimated that the funding under this order will cover the cost of performance through 30 June 2019. In accordance with contract clause 52.232-22, Limitation of Funds, the Government is not obligated to reimburse the contractor for any costs incurred in excess of [REDACTED] unless additional funds are made available and obligated under this order in a subsequent modification. The total unfunded balance remaining is \$[REDACTED] based on the total delivery order value.

Section C - Descriptions and Specifications

STATEMENT OF WORK



**Statement of Work (SOW) for
Installations and Upgrades to LHD-7 Auxiliary and Fluid Control Systems in Support of
NSWCPD Fluid Systems Automation Branch**

1.0 INTRODUCTION

The Naval Surface Warfare Center Philadelphia Division (NSWCPD) is a Department of Defense entity responsible for research and development, test and evaluation, engineering and fleet support organization for the Navy's ships, submarines, military watercraft and unmanned vehicles. This requirement is for NSWCPD Code 517, which is responsible for the coordination

and planning of all engineering and technical support services for the Auxiliary and Fluid Control System (AFCS) and related Fluid Control Systems aboard U.S. Navy vessels.

1.1 BACKGROUND

The mission of NSWCPD Code 517 is to provide in-service and modernization engineering for the controls and automation of shipboard Fluid Systems in order to support sponsors of Navy Modernization Programs. The purpose of this effort is to support NSWCPD Code 517 with its work on Modernization Programs and in its capacity as the In-Service Engineering Agent (ISEA) for various Hull, Mechanical, and Electrical (HM&E) systems and equipment. The programs consist of critical-path Modernization efforts, such as Ship Change (SC)/Ship Alterations (SHIPALTs), as part of key production light-off and testing milestones during Chief of Naval Operations availabilities. Timely execution of these installations is crucial to the success of these programs. Additionally, these installs are intricate and affect system arrangement, interface, and distributive systems. Work includes performance on shipboard systems in the areas of Systems Engineering Support, Integrated Logistics Support, and Quality Assurance Support

1.2 SCOPE OF WORK

The Contractor shall provide all required labor, materials, and resources to integrate and modernize shipboard systems. Modernization services include fabrication of related components, system/equipment pre-installation checkout (PICO), shipboard installations, material support, and Quality Assurance inspection. Installation services are required to support various levels of ship systems integration. This integration covers component level digital upgrades through system level upgrades. Under this task order, the contractor shall provide all required labor, incidental materials, and resources to perform the installation services required in support of Fuel Oil Service Valves/Actuators and Fluid Control Systems.

2 APPLICABLE DOCUMENTS

- 2.1 MIL-STDS, MIL-SPECS, and Instructions at, http://www.dsp.dla.mil/app_uil/SpecsAndStandards.aspx
- 2.2 Navy Modernization Program (NMP) Manual SL720-AA-MAN-030 at, <https://www.nde.navy.mil/>
- 2.3 NAVSEA Technical Specification 9090-310 (revision) at, <https://www.nde.navy.mil/>
- 2.4 NAVSEA Standard Items at, <http://www.navsea.navy.mil/CNRMC/SERMC/SSRAC1/standard.aspx>
- 2.5 NAVSEA C9210.4 (revision) - All non-nuclear work on nuclear powered ships must be in strict compliance with the Naval Sea Systems Command Instruction (classified instructions under separate cover)
- 2.6 Applicable Ship Change Documents (SCDs)/Ship Alteration Records (SARs) provided by NSWC PHILADELPHIA SME
- 2.7 Applicable Ship's Installation Drawings (SIDs) and Sketches provided by NSWC PHILADELPHIA SME
- 2.8 NAVSEA S9AAO-AB-GSO-010/GOS, General Specification for Overhaul of Surface Navy Ships
- 2.9 NAVSEA S9AAO-AA-SPN-010/GEN SPEC, General Specifications for Ships
- 2.10 CINCLANTFLT/CINCPACFLTINST 4790.3, Joint Fleet Maintenance Manual (JFFM)
- 2.11 MIL-STD-1310, (Navy) Bonding and Grounding
- 2.12 NAVSEA S9300-AW-EDG-010, Electrical Plant Installation Standard Methods (EPISM)
- 2.13 NAVSEA Technical Publication S9074-AQ-GIB-010/248, Requirements for Welding and Brazing Procedure and Performance Qualification
- 2.14 NAVSEA Technical Publication S9074-AR-GIB-010/278, Requirements for Fabrication Welding and Inspection, and Casting Inspection and Repair for Machinery, Piping, and Pressure Vessels
- 2.15 MIL-STD-1689A, Fabrication, Welding and Inspection of Ship Structures
- 2.16 NAVSEA Technical Publication 59074-AR-GIB-010/1688, Requirements for Fabrication Welding and inspection of Submarine Structure.

- 2.17 ISO-9001 Quality Systems - Model for Quality Assurance in Design, Development, Production, Installation and Servicing <http://www.iso.org>
- 2.18 ISO-9002 Quality Systems - Model for Quality Assurance in Production, Installation and Servicing <http://www.iso.org>
- 2.19 Joint Fleet Maintenance Manual (JFMM) – CINCLANT/CINCPACFLTINST 4790 (series).
- 2.20 NAVSEA Fleet Modernization Program (FMP) Management and Operations Manual (NAVSEA SL720-AAMAN010/020) (series).
- 2.21 MIL-STD-480: Configuration Control - Engineering Changes, Deviations and Waivers
- 2.22 General Specification for Overhaul of Surface Ships (NAVSEA S9AA0-AB-GSO-010) (series)
- 2.23 Technical Specification 9090-310 (series).
- 2.24 MIL-M-38784: Manuals, Technical: General Style and Format Requirements.

(Copies of the above specification, standards, and handbooks are available from the Naval Publication and Forms Center, Standardization Documents Order Desk, 700 Robbins Avenue, Building-4D, Philadelphia, PA 19111-5094 or at <http://quicksearch.dla.mil/>.)

The Contractor shall reference and utilize the latest version available when performing tasks within this SOW.

3 REQUIREMENTS

The Contractor shall provide all required labor, incidental materials, and resources to perform the installation and technical services required in support of Fuel Oil Service Valves/Actuators and Fluid Control Systems. The contractor shall provide/perform all requirements for the ships listed below.

3.1 LHD-7; Mayport, FL

3.1.1 SCD 10868: Fuel Oil Service Valve (FOSV) Upgrades

Period of Performance: Date of award – 31 MAY 2019

AIT is required to remove and replace (8) FOSVs including valve and actuator. There are (2) 3" suction valves and (2) 2" return valves located in Forward Main Machinery Room. There are (2) 3" suction valves and (2) 2" return valves located in Aft Main Machinery Room. Please refer to drawings (LHD-7 SCD 10868 Drawings) referenced in section 3.1.1.1 for specific instructions for removals and installation.

3.1.1.1 Verify proper function of actuators and valves in conjunction with the government prior to shipment to ship location.

3.1.1.2 Execute drawings in their entirety and procure all material in the BOM. Drawings included in attachment (LHD-7 SCD 10868 Drawings)

3.1.1.2.1 Remove existing actuators, valves, and motor controllers in accordance with (IAW) drawings.

3.1.1.2.2 Remove cables IAW drawings.

3.1.1.2.3 Install new valve/actuator assemblies IAW drawings.

3.1.1.2.4 Install new cabling and connectors IAW drawings.

3.1.1.2.5 Setup actuator limit switches for proper open/shut actuation and indication.

3.1.1.2.6 Execute all testing notes IAW all drawings listed in drawing package.

3.1.2 SCD 18107: Auxiliary and Fluid Control System Tech Refresh

Period of Performance: Date of Award – 31 May 2019

AIT is required to remove and replace (10) flat panel computers. All computers will require a new network connector and backshell. Foundation modifications will be required (welding). New flat panels are 25"x15.72"x3.5" and weigh 25 lbs including mounting bracket.

3.1.2.1 Execute drawings in their entirety and procure all material in the BOM. Drawings included in attachment (LHD-7 SCD 18107 Drawings)

3.1.2.1.1 Remove existing flat panels, brackets, and hardware. Legacy flat panels are 23.5"x20.75"x8.3" and weigh 66 lbs. May require rigging to remove.

3.1.2.1.2 Ship flat panels back to NSWC Philadelphia at 1601 Langley Ave BLDG 542 / Philadelphia, PA 19112 / ATTN: (b) (6) (b) (6)(b) (6)(b) (6)(b) (6)

3.1.2.1.3 Remove existing network connector (DO NOT remove power connector).

3.1.2.1.4 Rebuild network connector using shielded RJ45 connector and backshell.

3.1.2.1.5 Perform foundation modifications to include any welding, grinding, etc.

3.1.2.1.6 Grind flush any remnants of old foundation or any imperfections of new foundation.

3.1.2.1.7 Once hotwork completed and material cooled; prime, paint, and lag (where necessary) new foundations and any areas disturbed as a result of work related to this task.

3.1.2.2 Mount new flat panel computers on new foundations.

3.1.2.3 Connect existing power and new network connector to flat panels.

3.2 Installation Ground Rules

3.2.1 Prior to the installation start date, the Site Foreman shall meet with the NSWCPD Program Manager, ISEA or SME representative to review the installation plan, drawings and schedule and to reaffirm all requirements.

3.2.1.1 During the installation phase onboard the ship, the NSWCPD PM, SME, or OSIC representative will communicate their requirements to the Site Foreman (rather than individual team members). When the Foreman leaves the ship while work is in progress, he/she will appoint someone to act in his/her absence and identify this individual to the NSWCPD Representative.

3.2.1.2 The Site Foreman shall brief the NSWCPD OSIC daily on installation progress, including:

- (a) Status of planned production schedule
- (b) Number of personnel onboard
- (c) Material needed or proposed substitution
- (d) Any proposed design changes or interferences in the installation
- (e) Labor hours used on previous day
- (f) Status of local shipyard support

The Site Foreman shall also brief the NSWCPD OSIC on work progress/problems upon completion of each workday.

3.2.1.3 Contractor employees will not visit or contact ships without prior NSWCPD approval.

3.2.1.4 All communication with DOD, Naval Activities, and ships shall be via NSWCPD Program Manager, ISEA or SME.

3.2.1.5 Coordination of each Alteration /SC is the responsibility of the assigned NSWCPD AIT Program Manager / ISEA / SME and OSIC. The NSWCPD OSIC Representative may halt work and conduct an off-ship meeting whenever he/she determines that this is required to resolve problems. This responsibility applies to all aspects of an Alteration/SC.

3.2.1.6 AIT contractor site foreman and shipboard personnel must maintain all sections of a Quality Assurance (QA) workbook during industrial production. QA Workbook must be available onboard ship for OSIC review and Naval Supervising Activity QA inspection / Ship Building Specialist review.

- 3.2.1.7 Contractor develops In-Process Control Procedures (IPCPs) utilizing NAVSEA Standard Items and design detailing their process for installing the SC/alterations. Contractor will develop their In-Process Control Procedures (IPCPs) in accordance with NSI 009-09

3.3 Integrated Logistics Support:

Contractor shall provide support in the area of material shipment and receiving, while ensuring inventory records are updated accordingly.

3.4 Quality Assurance Support:

- 3.4.1 Contractor shall perform identification, condition assessments, and labeling in accordance with NAVSEA Standard Items.
- 3.4.2 Contractor provides Quality Assurance and inspection to support the proper installation for technologies being introduced into existing platforms.
- 3.4.3 Contractor shall update and maintain a quality assurance program to support the AIT efforts tasked under this contract.
- 3.4.4 Contractor shall submit a written quality assurance plan to the Program Office for approval. Separate tasks require a quality assurance workbook. The Contractor shall remain 100 percent responsible for adherence to their approved quality manual. The Contractor will maintain this system at no cost to the Government and submit all updates to the SME immediately for his/her concurrence for use on this contract. In either case, the Contractor will submit all required processes, instructions, licenses, certificates, standards and other information the SME requires to ensure compliance with this requirement. The prime Contractor is responsible for auditing and certifying that all consultants, subcontractors and suppliers are in compliance with these quality requirements.
- 3.4.5 Contractor shall maintain all necessary process control sheets in accordance with Program Office Alteration Quality Assurance Plan. Ensure Quality Assurance Inspections and Tests are accomplished in accordance with approved drawings, and applicable Government and commercial standards and specifications including documents listed in the Standards/Specification section of this SOW.
- 3.4.6 Offerors must provide a QA Workbook a minimum of forty-five (45) days prior to the start of each installation. The QA Workbook must follow the format and content as prescribed in NAVSEA Technical Specification 9090-310G. All welding and brazing procedures must be approved prior to the start of installation. The Offeror must identify all Level III procedures (including PCPs) on a company letterhead that will be used during the install. Submitted procedures must include any pre-fabrication and/or subcontractor work. Furthermore, all procedures require identification of I, V & G checkpoints.

3.5 Material Support.

- 3.5.1 The Contractor shall purchase and provide all IAF (Installing Activity Furnished) material listed on the Ship Installation Drawings (SID).
- 3.5.2 The Contractor is authorized to purchase and provide materials incidental to the performance of the services to be furnished under individual task orders.
- 3.5.3 It is anticipated that incidental materials will be required for the contractor to procure to support installations. These items include: metal plate, angle, bar, channel, pipe, tee, elbow, coupling, welding electrode, welding studs, welding rods, cable hangers, electrical cable, circuit breakers, electrical lugs, connectors/backshells, paint, lagging paste, rubber channel, hydraulic fluid, various oils, electrical/mechanical switches, gaskets, stuffing tubes, packing assembly, paint roller, paint brushes, fire cloth, masking tape, and gloves. Please refer to drawings for any other materials not listed above.

4 DATA REQUIREMENTS

4.1 The contractor shall provide the following deliverables associated with the tasking effort:

- 4.1.1 CDRL A001, Delivery Order Status Report
- 4.1.2 CDRL A002, Contract Financial Status Report (Monthly)
- 4.1.3 CDRL A003, Plan of Action & Milestones (POAM)
- 4.1.4 CDRL A004, Quality Assurance (QA) Workbook
- 4.1.5 CDRL A007, Weekly Production Status Reports
- 4.1.6 CDRL A008, Redlined Ship Installation Drawings (SID), As required/requested by SME
- 4.1.7 CDRL A011, Pre-Project GFE/CFE Warehouse Inventory Report
- 4.1.8 CDRL A013, Pre-installation Site Survey Results
- 4.1.9 CDRL, Earned Value Management Report (Monthly)

5 PLACE OF PERFORMANCE

All contractor work will be performed on site or in the contractor's own facility for parts that require prefabrication. These parts will be specified in the drawing packages. Please see Section 3 for specific locations.

6 TRAVEL

The Contractor may be required to travel from the primary performance location when supporting this requirement. The estimated number of trips is 3.

Travel in support of this requirement is anticipated to include, but may not be limited to, the following locations:

Mayport, FL – (3) Trips

All travel shall be conducted in accordance with FAR 31.205-46, Travel Costs, and HQ B-2-0020 Travel Cost – Alt I (NAVSEA). The Contractor will be authorized travel expenses and will be reimbursed for its reasonable actual travel costs in accordance with FAR 31.205-46 Travel Costs. The Contractor shall submit travel reports in accordance with DI-MGMT-81943 (CDRL A002).

7 GOVERNMENT FURNISHED PROPERTY

All Government Furnished Property (GFP) will be sent from the Naval Surface Warfare Center, Philadelphia Division. NSWCPD will coordinate with the contractor and the ship to determine where the shipment(s) will be sent, and when the shipment should be picked up. All GFP (Requisitioned Government Furnished Property.PDF) shall be shipped to availability location no later than 30 days prior to availability start date. Items to be provided by NSWCPD are as follows:

1. 24" Flat Panel / PN 140CRS0028 / QTY 11
2. Connector Plug (PWR) / PN D38999/26WC4S / QTY 11
3. Backshell (PWR) / PN M85049/1813W03A / QTY 11
4. RJ45 Plug/Backshell (Network) / PN RJFTV6MG, POS A / QTY 11

8 GOVERNMENT FURNISHED INFORMATION

Ship Installation Drawings (SID) and Liaison Action Reports (LARs) for each individual task will be provided via digital media.

9 LEVEL OF EFFORT

Refer to the Independent Government Estimate (IGE).

10 Enterprise-Wide Contracting Manpower Reporting Application (ECMRA)

"The Contractor shall report Contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the [NAMED COMPONENT] via a secure data collection site. Contracted services excluded from reporting are based on Product Service Codes (PSCs). The excluded PSCs are:

- (1) W, Lease/Rental of Equipment;
- (2) X, Lease/Rental of Facilities;
- (3) Y, Construction of Structures and Facilities;
- (4) D, Automatic Data Processing and Telecommunications, IT and Telecom-Telecommunications Transmission (D304) and Internet (D322) ONLY;
- (5) S, Utilities ONLY;
- (6) V, Freight and Shipping ONLY.

The Contractor is required to completely fill in all required data fields using the following web address <https://doncmra.nmci.navy.mil>.

Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at <https://doncmra.nmci.navy.mil>.

11 RELEASE OF INFORMATION

All technical data provided to the contractor by the Government and/or by the contractor for the Government shall be protected from public disclosure in accordance with the markings contained therein. All other information relating to the items being delivered or services being performed under this delivery order may not be disclosed by any means without prior approval of the authorized representative of the contracting officer. Dissemination or public disclosure includes, but is not limited to: permitting access to such information by foreign nationals or by any other persons on entity, publication or technical or scientific, advertising, or any other proposed public release. The contractor shall provide adequate physical protection to such information so as to preclude access by any person or entity not authorized such access by the Government.

12 SECURITY REQUIREMENTS

Security requirements shall be IAW the requirements laid out in the SOW for the Multiple Award Contract (MAC).

13 OVERTIME

Refer to the Independent Government Estimate (IGE). Additional Overtime shall be as required and approved by the SME.

14 PERIOD OF PERFORMANCE

From date of award to 30 JUNE 2019.

15 SUBJECT MATTER EXPERT (SME)

The SME for this contract is (b) (6)(b) (6)(b) (6)(b) (6)(b) (6)(b) (6)

16 CONTRACTING OFFICER'S REPRESENTATIVE (COR)

The COR for this contract is (b) (6)(b) (6)(b) (6)(b) (6)(b) (6)(b) (6)(b) (6)

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0003	N/A	N/A	N/A	N/A
0003AA	Destination	Government	Destination	Government
0003AB	Destination	Government	Destination	Government
0004	N/A	N/A	N/A	N/A
0004AA	Destination	Government	Destination	Government
0004AB	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION


CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC / CAGE
0003	N/A	N/A	N/A	N/A
0003AA	POP 14-SEP-2018 TO 30-JUN-2019	N/A	NAVAL SURFACE WARFARE CENTER PHILA (b) (6)(b) (6)(b) (6)(b) (6) NSWC PHILADELPHIA DIVISION 1601 LANGLEY AVENUE BLDG 542 PHILADELPHIA PA 19112 (b) (6)(b) (6) FOB: Destination	N64498
0003AB	POP 14-SEP-2018 TO 30-JUN-2019	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	N64498
0004	N/A	N/A	N/A	N/A
0004AA	POP 14-SEP-2018 TO 30-JUN-2019	N/A	NAVAL SURFACE WARFARE CENTER PHILA (b) (6)(b) (6)(b) (6)(b) (6) NSWC PHILADELPHIA DIVISION 1601 LANGLEY AVENUE BLDG 542 PHILADELPHIA PA 19112 (b) (6)(b) (6) FOB: Destination	N64498
0004AB	POP 14-SEP-2018 TO 30-JUN-2019	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	N64498

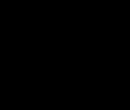
Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 1781804 60BA 257 4002A R 068732 2D C888PL

COST CODE: 4002A8BCNWJP

AMOUNT 

ACRN	CLIN/SLIN	CIN	AMOUNT
AA	0003AB	130073440700001	
	0004AB	130073440700002	

CLAUSES INCORPORATED BY REFERENCE

52.232-22 Limitation Of Funds

APR 1984

Section I - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.223-18	Encouraging Contractor Policies To Ban Text Messaging While Driving	AUG 2011
52.232-19	Availability Of Funds For The Next Fiscal Year	APR 1984
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting	OCT 2016